STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 148697

TO: Ralph J Gitomer **Location: 3d65/3e71** **Art Unit: 1651** **Tuesday, April 05, 2005** **Case Serial Number: 10/665888**	**From: Noble Jarrell** **Location: Biotech-Chem Library** **Rem 1B71** **Phone: 272-2556** **Noble.jarrell@uspto.gov**

Search Notes

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=> d his

     (FILE 'HOME' ENTERED AT 08:35:44 ON 05 APR 2005)

     FILE 'HCAPLUS' ENTERED AT 08:35:49 ON 05 APR 2005
L1            1 US20050069970/PN

     FILE 'REGISTRY' ENTERED AT 08:36:38 ON 05 APR 2005

     FILE 'HCAPLUS' ENTERED AT 08:36:44 ON 05 APR 2005

     FILE 'REGISTRY' ENTERED AT 08:36:45 ON 05 APR 2005

     FILE 'WPIX' ENTERED AT 08:36:52 ON 05 APR 2005
L2            0 US20050069970/PN
                E CHONG Y/AU
L3           55 E3,E13
                E CHONG S/AU
L4           60 E3,E18,E20

     FILE 'STNGUIDE' ENTERED AT 08:38:32 ON 05 APR 2005

     FILE 'WPIX' ENTERED AT 08:47:31 ON 05 APR 2005

     FILE 'STNGUIDE' ENTERED AT 08:49:13 ON 05 APR 2005

     FILE 'WPIX' ENTERED AT 08:49:24 ON 05 APR 2005
L5        95436 (S03-E14H? OR B11-C08E6 OR C11-C08E6 OR B11-C10? OR C11-C10?)/M
L6            3 (GENERAL (1A) ATOMICS)/CS,PA
L7          508 (GEN? (1A) ATOMIC?)/CS,PA
L8          508 L6-7
L9           10 (L3 OR L4 OR L8) AND L5
L10      164877 (B05-A01A OR C05-A01A OR D05-H08)/MC OR C22B026-10 /IPC OR (A10
L11           5 L9 AND L10

=> b hcap
FILE 'HCAPLUS' ENTERED AT 08:56:55 ON 05 APR 2005
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FILE COVERS 1907 - 5 Apr 2005  VOL 142 ISS 15
FILE LAST UPDATED: 4 Apr 2005  (20050404/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d all l1

L1   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2005:284035  HCAPLUS
ED   Entered STN:  03 Apr 2005
TI   Detection of potassium ions using ion-sensitive enzymes
IN   Yuan, Chong-Sheng
PA   USA
SO   U.S. Pat. Appl. Publ., 9 pp.
     CODEN: USXXCO
DT   Patent
```

LA English
IC ICM C12Q001-42
NCL 435021000
CC 9 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005069970	A1	20050331	US 2003-665888	20030919 <--
	WO 2005029038	A2	20050331	WO 2004-US30733	20040917

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-665888 A 20030919
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20050069970	ICM	C12Q001-42
	NCL	435021000

AB The invention relates generally to the field of potassium ion detection. In particular, the invention provides methods and kits for assaying for potassium ions in a sample, using inter alia, a potassium-dependent urea amidolyase (UAL).

=> b wpix
FILE 'WPIX' ENTERED AT 08:57:02 ON 05 APR 2005
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FILE LAST UPDATED: 1 APR 2005 <20050401/UP>
MOST RECENT DERWENT UPDATE: 200521 <200521/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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http://thomsonderwent.com/support/userguides/ <<<

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>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501. PLEASE CHECK:
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=> d all l11 tot

L11 ANSWER 1 OF 5 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2004-216595 [21] WPIX
DNN N2004-171633 DNC C2004-085632
TI A network of micro-magnetoelastic bio-chips is vibrated by an alternating current magnetic field, for changes in the impedance at the DNA probes to be analyzed, for real time data on hybridizing.
DC B04 D16 L03 Q68 S03 U13 V06

IN CHANG, K K; CHEONG, S Y; **CHONG, S Y**; JI, H L
PA (HANY-N) HANYANG HAK WON CO LTD
CYC 1
PI FR 2842605 A1 20040123 (200421)* 25 G01N033-483
ADT FR 2842605 A1 FR 2002-13584 20021030
PRAI KR 2002-2879 20020722
IC ICM G01N033-483
ICS B81B003-00; B81C001-00; C12Q001-68; **G01N033-53**; G01N033-68
AB FR 2842605 A UPAB: 20040326
NOVELTY - A network of micro-magnetoelastic bio-chips (2) is assembled for the detection of the hybridizing of a DNA target. They are vibrated by an alternating current (AC) magnetic field, together with the DNA probes (4).
DETAILED DESCRIPTION - The changes in the resonance frequency at the probes, through the hybridizing of the DNA, are detected by a coil which registers changes in impedance for analysis. The bio-chip is fabricated in thin layers of silicon and tungsten by cathode sputtering.
USE - The bio-chip network is for the detection of DNA hybridizing.
ADVANTAGE - The system gives real time data on the immobilizing and hybridizing of genetic material, without the use of radioactive isotopes or enzymes, or fluorescent markers.
DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a bio-chip with immobilized DNA probes. (The drawing includes non-English language text).
Bio-chip 2
DNA probes 4
Dwg. 1a/5
FS CPI EPI GMPI
FA AB; GI
MC CPI: B04-E01; B04-E05; B11-C08E5; B11-C08F2; B12-K04F; D05-H09; D05-H12D1; D05-H18; L03-H03B
EPI: **S03-E14H**; U13-C05; V06-E06; V06-K07; V06-L03; V06-M06G; V06-N22

L11 ANSWER 2 OF 5 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2003-842412 [78] WPIX
DNC C2003-236724
TI Assaying S-adenosylmethionine (SAM)-dependent methyltransferase comprises converting SAM to S-adenosylhomocysteine (SAH), contacting with mutant SAH hydrolase and detecting SAH-mutant hydrolase and SAH binding.
DC B04 D16
IN YUAN, C
PA (GEAT) **GEN ATOMICS**
CYC 1
PI US 6610504 B1 20030826 (200378)* 81 C12Q001-48
ADT US 6610504 B1 US 2000-546013 20000410
PRAI US 2000-546013 20000410
IC ICM C12Q001-48
ICS C12Q001-34
AB US 6610504 B UPAB: 20031203
NOVELTY - Assaying S-adenosylmethionine (SAM)-dependent methyltransferase (I) activity comprising contacting (I) with substrate of methyltransferase in presence of SAM to convert SAM into S-adenosylhomocysteine (SAH); contacting resulting SAH with a mutant SAH hydrolase (II); and detecting binding between SAH and (II) to detect or determine presence or amount of SAH, is new.
DETAILED DESCRIPTION - Assaying (M1) for the activity of a S-adenosylmethionine (SAM)-dependent methyltransferase (I), comprises:
(a) contacting (I) with a substrate of the methyltransferase in the presence of SAM, where a methyl group is transferred from the methyltransferase to the substrate and the SAM is converted into S-adenosylhomocysteine (SAH);
(b) contacting the resulting SAH with a mutant SAH hydrolase which substantially retains its binding affinity or has enhanced binding affinity for SAH but has attenuated catalytic activity; and
(c) detecting binding between the SAH and the mutant SAH hydrolase to detect or determine the presence or amount of the SAH, where the activity of (I) is assessed.
USE - (M1) is useful for assaying for the activity of SAM-dependent methyltransferase. (M1) is useful for assaying for the activity of the methyltransferase in a diagnostic assay, and for screening compounds that

modulate the activity of the methyltransferase (claimed). The methods can be used to diagnose or detect disorders or conditions associated with methyltransferases. The particular disease or condition that is diagnosed is dependent upon the methyltransferase with which the methyl donor functions, and further selected substrate. Different types of methyltransferases react with different types of substrates, and particular methyltransferases may have specific substrates. By assessing the activity of the methyltransferase in a sample, such as a body tissue or body fluid sample, the level of the activity can be correlated with a particular disease or disorder. In addition, the presence or absence of a particular substrate in a body tissue or body fluid sample may be assessed by selecting a particular methyltransferase specific for the substrate and assessing the activity of the methyltransferase that is contacted with a biological sample, such as a body tissue or fluid. The level of activity of the methyltransferase is indicative of the presence and amount of the substrate present in the sample. In addition, the ability to assess the activity of methyltransferase, provides a means to screen for compounds that modulate the activity of a methyltransferase. Compounds that modulate the activity of a methyltransferase would be candidates for therapeutic agents for treatments of diseases with altered methyltransferase activity. Dwg.0/0

FS CPI
FA AB
MC CPI: B04-L04; B04-L05; B11-C07B3; B11-C08E3; **B11-C08E6**; B12-K04A; B12-K04E; D05-A02B; D05-H09

L11 ANSWER 3 OF 5 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1994-144300 [17] WPIX
DNN N1994-113664 DNC C1994-066148
TI Sequencing method for double-stranded DNA - by producing shifted DNA duplex and sequencing both shifted and unshifted target DNA for comparison.
DC B04 D16 S03
IN MILLER, R L; OHKAWA, T
PA (GEAT) **GEN ATOMICS**
CYC 1
PI US 5308751 A 19940503 (199417)* 20 C12Q001-68
ADT US 5308751 A US 1992-855293 19920323
PRAI US 1992-855293 19920323
IC ICM C12Q001-68
ICS **G01N033-50**
AB US 5308751 A UPAB: 19940613
Simultaneously sequencing both strands of a target double-stranded DNA fragment (I) containing single strands a and b of lengths n and m, respectively, comprises (i) preparing shifted DNA from a portion of the target DNA (I) such that strand a is shifted by i bases compared to the a strand of (I) and strand b is shifted by k bases compared to (I); and i is less than or equal to o and less than n and k is less than or equal to o and less than m, except that k is not equal to i; (ii) simultaneously sequencing both strands of the shifted DNA and simultaneously sequencing both strands of the target DNA to generate a data set go of alternative base pairs for (I) and a data set g1 of alternative base pairs for the shifted DNA, in which the method of sequencing generates only 2 alternative bases for each position; b(-)n + i + j = ai; b(-)n + 1-i = a(-)i; g(o) = ((a1, a(-)n),.... (an, a(-)1)); g1 = ((ai + 1, a(-)n)....(ai+m,a(-)n-m+1)); the jth elements of go and g- are goj = (aj, a(-)n + i-j) and gij = (ai+j,a(-)n+1-k-j), respectively; j = 1 to n; and (iii) determining all or a portion of the nucleotide sequence of (I) by comparison of go with gi to determine the identity of each aj by: (1) comparing goj with g(-)on+1-j and, if j is up to i + 1 and at least i + m, with gij-i, and if j is up to n-k and is at least n-m-k+1, with g(-)1n+1-j-k to determine aj, except where a(-)n+1-j = a(-)n+1-k-j+1, in which goj = (aj, a(-)n+1-j); g-on+1-j = (a-n+1-j,aj); gij-i = (aj,a(-)n+1-k-j+1); and g(-)in+1-j-k = (a(-)n+1-k-j-i,aj); (2) where a(-)n+1-j = a(-)n+1-k-j+i, the identity of aj is determined by first determining the identity of a(-)n+1-j, or a(-)n+1-j-k-i and then performing step (1) to determine the identity of aj, where the identity of a(-)n+1-j is determined by comparing goj, g(-)in+1-j, gij-k and g(-)1n+1-j-i, in which gijk = (a1+j-k, a(-)n+1-j) and g(-)1n+1-j-i = (a(-)+1-j, a1+j-k); and the identity of a(-)n+1-j-k-i is determined by

comparing goj+k-i, g(-)on+1-j-k+i), g1j-im g(-)1n-1-j-k, in which goj+k-i = (aj+k-i, a(-)n+1-j-k+i) and gon+1-j-k+i = (a(-)n+1-j-k+i)ak+k-i); and (3) performing steps (1) and (2) for j = 1 up to n, and in which the portion includes more than the part of the target DNA than is included in the shifted DNA.

USE/ADVANTAGE - The method will find use for assessing and understanding gene expression and regulation. The method permits errors in sequences to be detected. In certain circumstances, it also permits correction. C.f. the prior art, fewer reactions and gel sepns. are required in order to achi

Dwg.1/4

FS CPI EPI
FA AB; GI
MC CPI: B04-E01; B11-C08E4; B12-K04F; D05-H18A
EPI: **S03-E14H9**

L11 ANSWER 4 OF 5 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1993-287859 [36] WPIX
CR 1991-016391 [03]; 1991-016392 [03]; 1992-415215 [50]
DNN N1993-221424 DNC C1993-128481
TI Micro-pipette adaptor for spectrophotometer - has base member to hold capillary tube filled with sample material for analysis and linearly focused light aligned along tube providing high intensity light input for sample.
DC B04 D16 J04 S03
IN GARNER, H R
PA (GEAT) **GEN ATOMICS**
CYC 1
PI US 5241363 A 19930831 (199336)* 12 G01N021-01
ADT US 5241363 A CIP of US 1989-377476 19890710, CIP of US 1989-407539 19890915, US 1992-843443 19920228
FDT US 5241363 A CIP of US 4991958, CIP of US 5092674
PRAI US 1989-377476 19890710; US 1989-407539 19890915; US 1992-843443 19920228
IC ICM G01N021-01
ICS G01N021-31
AB US 5241363 A UPAB: 19931122
A temperature-controlled micropipette adaptor includes a metal base sandwiched between two plastic layers. The metal base has an orifice to hold a micropipette. The plastics layers hold lenses in alignment for spectrophotometric measurements of a sample contained in a micropipette inserted into the orifice. A resistive heater wire or thermoelectric heater/cooler is held between the metal base and the plastic layer to transfer heat from the heater wire or thermoelectric device to the metal base and thus to the micropipette sample. A thermocouple is attached to the metal layer to monitor temperature changes.

A feedback control system is coupled to the device for monitoring and programmably controlling changes in temperature of the heated sample over time. As desired, a microprocessor can be electrically connected between the heater wire or thermoelectric device and the output signal of the spectrophotometer to selectively energise the heater wire thermoelectric device in response to the output signal of the spectrophotometer.

ADVANTAGE - Predetermined temperature profile schedule can be changed in response to observed changes in light absorption characteristics of the DNA soln in order to optimise Polymerise chain reaction process. Allows heating small quantities of sample in controlled and efficient manner, measurement sensitivity is increased, and sample holder is easily installed or replaced. Comparatively cost-effective to operate, temperature of sample is controllable, provides temperature controlled micropipette adaptor capable of easily attaining higher sample temperature and is capable of maintaining predetermined temperature for desired length of time.

Dwg.10/12

FS CPI EPI
FA AB
MC EPI: S03-E01; S03-E04A5; **S03-E14H9**

L11 ANSWER 5 OF 5 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1992-114461 [14] WPIX
DNN N1992-085548 DNC C1992-053402
TI Coated hollow tube for determn. of protein cpds. in solution - with coating

containing reagents forming complexes for electromagnetic detection and binding agent for carbohydrate determn..
DC B04 D16 J04 S03
IN GARNER, H R; PERANICH, L S; TUASON, O F; GARNER, H; TUASON, O E
PA (GEAT) **GEN ATOMICS**
CYC 13
PI WO 9204613 A 19920319 (199214)* 35
RW: AT CH DE DK ES GB GR LU NL SE
W: CA JP US
JP 06501099 W 19940203 (199410) 35 G01N021-77
US 5387526 A 19950207 (199512) 11 G01N021-03
ADT WO 9204613 A WO 1991-US6567 19910911; JP 06501099 W JP 1991-516715 19910911, WO 1991-US6567 19910911; US 5387526 A CIP of US 1990-581521 19900911, WO 1991-US6567 19910911, US 1993-30445 19930330
FDT JP 06501099 W Based on WO 9204613
PRAI US 1990-581521 19900911
REP US 4482636; US 4495151; US 4533629; US 4608231; US 4960566; US 5009998
IC G01N021-03; G01N033-54
ICM G01N021-77
ICS G01N021-03; G01N021-59; G01N021-64; G01N033-54
AB WO 9204613 A UPAB: 19931006
Container comprises (a) a hollow tube transparent to a portion of the electromagnetic spectrum, and (b) a coating compsn. deposited on the inner walls of the tube, where (i) the coating contains reagent(s) and a binding agent, (ii) the binding agent is cpd(s) that delays dissolution of the reagent in a sample solution which is introduced into the tube for a time sufficient to fill the tube with the sample solution, (iii) the reagent(s) are reversibly bound to the wall and forms complexes with cpds. in the solution, so upon exposure to electromagnetic radiation through the walls of the tube, the complex absorbs or emits electromagnetic radiation and (iv) the amount of reagent in the coating is sufficient to quantitatively bind to a cpd. in the solution to detect cpd. The container may be mounted in a spectrometer. The reagents in the coating may be e.g. Lowry reagent, Biuret Cu(2+), Coomassie brilliant blue, Hoechst dye, ethidium homodimer, ethidium bromide, fluorescamine or a luciferase. The binding agent may contain e.g. a sugar (e.g. sucrose), a polysaccharide, a gelatin, a polyacrylamide or agarose.
USE/ADVANTAGE - For rapidly and quantitatively detecting and identifying cpds. e.g. DNA, RNA, complex carbohydrates or proteins in relatively small amts. of solution
2A/7
FS CPI EPI
FA AB; GI; DCN
MC CPI: B04-B02C2; B04-B04A1; B04-B04A6; B05-A03A; B06-A01; B06-A03; B06-D05; B06-D13; B10-A13D; B11-C07B2; B12-K04; D05-H09; J04-B01B
EPI: S03-E04A5; S03-E04X; S03-E13B1; **S03-E14H**

=> b home
FILE 'HOME' ENTERED AT 08:57:10 ON 05 APR 2005

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=> b reg
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STRUCTURE FILE UPDATES:    4 APR 2005  HIGHEST RN 847897-28-3
DICTIONARY FILE UPDATES:   4 APR 2005  HIGHEST RN 847897-28-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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*                                                                    *
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* available and contains the CA role and document type information.  *
*                                                                    *
**********************************************************************

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http://www.cas.org/ONLINE/DBSS/registryss.html

=> d ide l12 tot

L12  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   7440-09-7  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Potassium (8CI, 9CI)  (CA INDEX NAME)
DR   31079-13-7
MF   K
CI   COM
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
       ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
       MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER,
       TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
     Other Sources:   DSL**, EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)


K


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

          205923 REFERENCES IN FILE CA (1907 TO DATE)
            4121 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
          206049 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)


=> d ide l22 tot

L22  ANSWER 1 OF 9  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   160600-81-7  REGISTRY
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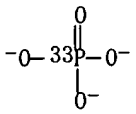
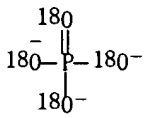
ED Entered STN: 03 Feb 1995
CN **Phosphate-33P (9CI)** (CA INDEX NAME)
FS 3D CONCORD
MF **04 P**
SR CA
LC STN Files: AGRICOLA, CA, CAPLUS, TOXCENTER, USPATFULL



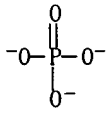
7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 143456-71-7 REGISTRY
ED Entered STN: 16 Sep 1992
CN **Phosphate-1804 (9CI)** (CA INDEX NAME)
FS 3D CONCORD
MF **04 P**
SR CA
LC STN Files: CA, CAPLUS



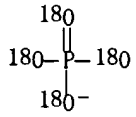
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 124772-01-6 REGISTRY
ED Entered STN: 19 Jan 1990
CN **Phosphate, labeled with oxygen-18 (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN **Phosphate-180**
FS 3D CONCORD
MF **04 P**
SR CA
LC STN Files: CA, CAPLUS
IL XO-18



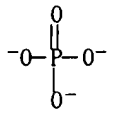
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 64942-30-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate(1-), tetraoxo-1804- (9CI)** (CA INDEX NAME)
MF **04 P**
LC STN Files: CA, CAPLUS



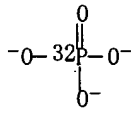
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 35473-44-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate(4-), tetraoxo- (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN Phosphorus oxide ion (PO44-)
DR 12509-86-3
MF **O4 P**
CI RIS
LC STN Files: CA, CAPLUS



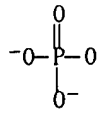
5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 18274-25-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate-32P (8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN **Phosphate (32PO4)**
CN **[32P]Orthophosphate**
MF **O4 P**
LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, GMELIN*, NIOSHTIC, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



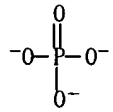
74 REFERENCES IN FILE CA (1907 TO DATE)
74 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 17167-94-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate(2-), tetraoxo- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phosphorus oxide (PO4), ion(2-) (8CI)
OTHER NAMES:
CN **Phosphate ion (PO42-)**
CN **Phosphate radical (PO42-)**
CN **Tetraoxophosphate(2-)**
DR 12509-85-2
MF **O4 P**
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



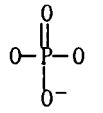
56 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
56 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14265-44-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate (8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN **Orthophosphate**
CN **Orthophosphate (PO43-)**
CN **Orthophosphate(3-)**
CN **Phosphate (PO43-)**
CN **Phosphate anion(3-)**
CN **Phosphate ion (PO43-)**
CN **Phosphate ion(3-)**
CN **Phosphate trianion**
CN **Phosphate(3-)**
CN Phosphoric acid, ion(3-)
FS 3D CONCORD
DR 264888-19-9
MF **O4 P**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, NIOSHTIC, PIRA, PROMT, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



37162 REFERENCES IN FILE CA (1907 TO DATE)
420 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
37189 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L22 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2005 ACS on STN
RN 12509-84-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN **Phosphate(1-), tetraoxo- (9CI)** (CA INDEX NAME)
MF **O4 P**
LC STN Files: CA, CAPLUS

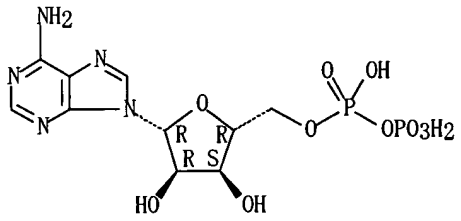


3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d ide l24

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 58-64-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Adenosine 5'-(trihydrogen diphosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(trihydrogen pyrophosphate) (8CI)
CN Adenosine diphosphate (6CI)
OTHER NAMES:
CN α-ADP
CN 5'-ADP
CN Adenosine 5'-diphosphate
CN Adenosine 5'-diphosphoric acid
CN Adenosine 5'-pyrophosphate
CN Adenosine 5'-pyrophosphoric acid
CN Adenosine pyrophosphate
CN Adenosine, 5'-(trihydrogen diphosphate)
CN **ADP**
CN ADP (nucleotide)
FS STEREOSEARCH
DR 84412-16-8
MF **C10 H15 N5 O10 P2**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

24702 REFERENCES IN FILE CA (1907 TO DATE)
674 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
24714 REFERENCES IN FILE CAPLUS (1907 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> => d ide l37 tot

L37 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN **9002-13-5** REGISTRY
ED Entered STN: 16 Nov 1984
CN Urease (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN E.C. 3.5.1.5
CN Urea amidohydrolase
CN Urease LF
MF Unspecified
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,

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      MSDS-OHS, NAPRALERT, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USPAT2,
      USPATFULL, VTB
        (*File contains numerically searchable property data)
    Other Sources:   EINECS**, TSCA**
        (**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
          7853 REFERENCES IN FILE CA (1907 TO DATE)
           243 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
          7866 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> d his

     (FILE 'HOME' ENTERED AT 08:35:44 ON 05 APR 2005)

     FILE 'HCAPLUS' ENTERED AT 08:35:49 ON 05 APR 2005
L1            1 US20050069970/PN

     FILE 'REGISTRY' ENTERED AT 08:36:38 ON 05 APR 2005

     FILE 'HCAPLUS' ENTERED AT 08:36:44 ON 05 APR 2005

     FILE 'REGISTRY' ENTERED AT 08:36:45 ON 05 APR 2005

     FILE 'WPIX' ENTERED AT 08:36:52 ON 05 APR 2005
L2            0 US20050069970/PN
                E CHONG Y/AU
L3           55 E3,E13
                E CHONG S/AU
L4           60 E3,E18,E20
L5        95436 (S03-E14H? OR B11-C08E6 OR C11-C08E6 OR B11-C10? OR C11-C10?)/M
L6            3 (GENERAL (1A) ATOMICS)/CS,PA
L7          508 (GEN? (1A) ATOMIC?)/CS,PA
L8          508 L6-7
L9           10 (L3 OR L4 OR L8) AND L5
L10      164877 (B05-A01A OR C05-A01A OR D05-H08)/MC OR C22B026-10 /IPC OR (A10
L11           5 L9 AND L10

     FILE 'REGISTRY' ENTERED AT 09:08:55 ON 05 APR 2005
                E POTASSIUM/CN
L12           1 E3
                E AMIDOLYASE/CN
L13          27 UREA (1A) AMIDOLYASE
                E PHOSPHATE/CN
                E PHOSPHATE/CN
L14           4 E3-7
L15       13746 O4P
L16       12796 L15 AND PHOSPHATE
L17           QUE (PMS OR MAN OR IDS)/CI OR UNSPECIFIED OR COMPD OR COMPOUND
L18       12481 L16 NOT L17
L19         306 L18 NOT TIS/CI
L20           9 L19 AND NC=1
L21           2 L14 AND O4P
L22           9 L20-21
                E ADP/CN
L23           6 E3
L24           1 C10H15N5O10P2 AND L23
L25         167 C10H15N5O10P2 NOT L17

     FILE 'HCAPLUS' ENTERED AT 09:40:20 ON 05 APR 2005
L26           QUE (L12 OR POTASSIUM OR K)(L) ANT/RL
L27           QUE L24-25 OR ADENOSINE (1A) (TRIHYDROGEN (1A) ?PHOSPH?/BI OR ?
L28           QUE L22 OR ?PHOSPHATE/BI OR PHOSPHOROUS (1A) ?OXIDE/BI (1A) ION
L29          33 L26 AND L27 AND L28
                E YUAN C/AU
L30         159 E3,E18
                E YUAN CHONG/AU
L31          54 E3,E5-6
L32        1258 (GEN? (1A) ATOMIC?)/CS,PA
```

```
L33           0 L13 AND L29
L34           1 L13 AND L27 AND L28
                E LYASE/CT
                E E3+ALL
L35          36 LYASE+OLD,NT/CT (L) AMIDO?
L36          10 L35 (L) UREA?

     FILE 'REGISTRY' ENTERED AT 09:51:58 ON 05 APR 2005
L37           1 9002-13-5

     FILE 'HCAPLUS' ENTERED AT 09:55:12 ON 05 APR 2005
L38       11408 L37 OR UREASE OR UREA (1A) AMIDOHYDROLASE OR "E.C.3.5.1.5" OR "
L39           2 (L36 OR L38) AND L29
                E CHONG /S/AU
                E CHONG S/AU
L40          25 E3,E18
                E CHONG Y/AU
L41          30 E3,E13
                E CHONG SHENG Y/AU
L42           1 L39 AND (L30 OR L31 OR L32 OR L40 OR L41)
L43           1 L39 NOT L42
L44           9 L24-25 AND L26 AND L28
L45           1 L44 AND (L13 OR L35 OR L36 OR L38)

     FILE 'WPIX' ENTERED AT 10:03:29 ON 05 APR 2005
L46             QUE (POTASSIUM OR K)/BIX
L47      123926 (?PHOSPHATE OR PHOSPHOROUS (1A) ?OXIDE/BI (1A) ION OR PHOSPHORI
                E PHOSPHATE/DRN
                E E4+ALL
                E PHOSPHATE/DRN
                E E5+ALL
                E PHOSPHATE/DRN
                E E6+ALL
L48        5604 (1748 OR 1755 OR 1757)/DRN OR (R01748 OR R01755 OR R01757)/DCN
                E PHOSPHATE/CN
L49           2 E3-4
L50       22660 L47-49 AND (L10 OR L48)
                E ADENOSINE DIPHOSPHATE/DRN
                E E3+ALL
L51         392 0168/DRN OR R00168/DCN
L52             QUE (ADENOSINE (1A) ((TRIHYDROGEN OR TRI (1A) HYDROGEN) (1A) ?P
                E ADENOSINE DIPHOSPHATE/CN
L53           1 E3
L54         817 L50 AND L51-53
L55         406 L5 AND L54
                E YUAN C/AU
L56         169 E3,E10
L57             QUE (UREASE OR UREA (1A) AMIDOHYDROLASE OR "E.C.3.5.1.5" OR "EC
L58        1938 (B04-B02C5 OR C04-B02C5 OR B04-L06 OR C04-L06 OR D05-A01B4 OR D
L59          16 L54 AND L57-58
L60           0 L59 AND (L3 OR L4 OR L8 OR L56)
L61          11 L59 NOT (PY>2003 OR AY>2003 OR PRY>2003)
                SEL AN 4 5 8 10
L62           4 E1-4 AND L61
L63           7 (UREA (1A) AMIDOL!ASE?)/BIX
L64           3 L63 AND L54
                SEL AN 2
L65           1 E5 AND L64
L66           4 L62 OR L65

=> b hcap
FILE 'HCAPLUS' ENTERED AT 10:50:04 ON 05 APR 2005
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FILE COVERS 1907 - 5 Apr 2005 VOL 142 ISS 15
FILE LAST UPDATED: 4 Apr 2005 (20050404/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d all 142 tot

L42 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:31675 HCAPLUS
DN 134:83111
ED Entered STN: 12 Jan 2001
TI Methods and compositions for assaying analytes
IN **Yuan, Chong-Sheng**
PA **General Atomics, USA**
SO PCT Int. Appl., 187 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12Q001-00
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 7
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001002600	A2	20010111	WO 2000-US18057	20000630
	WO 2001002600	A3	20020110		
	WO 2001002600	C2	20020725		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6376210	B1	20020423	US 1999-347878	19990706
	CA 2377665	AA	20010111	CA 2000-2377665	20000630
	GB 2368641	A1	20020508	GB 2002-425	20000630
	GB 2368641	B2	20041006		
PRAI	US 1999-347878	A	19990706		
	US 1999-457205	A	19991206		
	WO 2000-US18057	W	20000630		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001002600	ICM	C12Q001-00
US 6376210	ECLA	C12Q001/25; G01N033/84; C12Q001/34; G01N033/573
GB 2368641	ECLA	C12Q001/25; C12Q001/34; G01N033/573; G01N033/84

AB Compns. and methods for assaying analytes, preferably, small mol. analytes are provided. Assay methods employ, in place of antibodies or mols. that bind to target analytes or substrates, modified enzymes, called substrate trapping enzymes. These modified enzymes retain binding affinity or have enhanced binding affinity for a target substrate or analyte, but have attenuated catalytic activity with respect to that substrate or analyte. The modified enzymes are provided. In particular, mutant S-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding affinity or having enhanced binding affinity for homocysteine or S-adenosylhomocysteine but having attenuated catalytic activity, are provided. Conjugates of the modified enzymes and a facilitating agent, such as agents that aid in purification or linkage to a solid support are also

provided.
ST compn assaying analyte
IT Enzymes, analysis
RL: ANT (Analyte); ANST (Analytical study)
(Bile acid-binding; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Bile salts-binding; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Cholesterol-binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(DNA-binding; methods and compns. for assaying analytes)
IT Conformation
(DNA; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Ethanol binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(Fluorescent; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Folate-binding; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Glucose-binding; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Homocysteine-binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(IgG-binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(Polysaccharide binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(RNA-binding; methods and compns. for assaying analytes)
IT Esters, analysis
RL: ANT (Analyte); ANST (Analytical study)
(Sterol fatty acid; methods and compns. for assaying analytes)
IT Carbohydrates, analysis
RL: ANT (Analyte); ANST (Analytical study)
(Tetroses; methods and compns. for assaying analytes)
IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Uric acid-binding; methods and compns. for assaying analytes)
IT Enzyme functional sites
(active; methods and compns. for assaying analytes)
IT Purification
(affinity; methods and compns. for assaying analytes)
IT Carbohydrates, analysis
RL: ANT (Analyte); ANST (Analytical study)
(aldoses; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(contractile; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(defense; methods and compns. for assaying analytes)
IT DNA
RL: ANT (Analyte); ANST (Analytical study)
(double-stranded; methods and compns. for assaying analytes)
IT Vitamins
RL: ANT (Analyte); ANST (Analytical study)
(fat-soluble; methods and compns. for assaying analytes)
IT Carbohydrates, analysis
RL: ANT (Analyte); ANST (Analytical study)

(heptoses; methods and compns. for assaying analytes)
IT Carbohydrates, analysis
RL: ANT (Analyte); ANST (Analytical study)
(ketoses; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(lipid-binding; methods and compns. for assaying analytes)
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(metal-binding; methods and compns. for assaying analytes)
IT Affinity
Amniotic fluid
Animal cell
Animal tissue
Anions
Artery
Blood analysis
Body fluid
Catalysts
Cell
Cerebrospinal fluid
Composition
Conjugation (molecular association)
Connective tissue
DNA repair
Disease, animal
Drugs
Epithelium
Epitopes
Escherichia coli
Feces
Fluorescent substances
Fungi
Genetic markers
Hydrolysis
Immobilization, biochemical
Infection
Insect (Insecta)
Ions
Lactobacillus casei
Liver
Lymph node
Michaelis constant
Molecules
Mucus
Muscle
Mutation
Neoplasm
Nerve
Organ, animal
Oxidation
Pancreas
Plant cell
Plasmids
Protein sequences
Purification
Recombination, genetic
Saliva
Semen
Sputum
Sulfhydryl group
Tear (ocular fluid)
Test kits
Therapy
Thermoanaerobacterium thermosulfurigenes
Transcription, genetic
Urine analysis
Yeast
(methods and compns. for assaying analytes)
IT Amino acids, analysis

Bile acids
Bile salts
Cardiolipins
Cerebrosides
Fusion proteins (chimeric proteins)
Gangliosides
Glycerides, analysis
Glycerophospholipids
Hexoses
Inorganic compounds
Lipids, analysis
Monosaccharides
Nucleic acids
Nucleosides, analysis
Nucleotides, analysis
Oligonucleotides
Oligosaccharides, analysis
Organic compounds, analysis
Pentoses
Peptides, analysis
Phosphatidylcholines, analysis
Phosphatidylethanolamines, analysis
Phosphatidylinositols
Phosphatidylserines
Polysaccharides, analysis
Sphingolipids
Sphingomyelins
Sterols
Transport proteins
Vitamins
Waxes
RL: ANT (Analyte); ANST (Analytical study)
(methods and compns. for assaying analytes)

IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(methods and compns. for assaying analytes)

IT Coenzymes
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(methods and compns. for assaying analytes)

IT Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(methods and compns. for assaying analytes)

IT Enzymes, uses
RL: ARG (Analytical reagent use); CAT (Catalyst use); ANST (Analytical study); USES (Uses)
(methods and compns. for assaying analytes)

IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(motile; methods and compns. for assaying analytes)

IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(nutrient; methods and compns. for assaying analytes)

IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(regulatory; methods and compns. for assaying analytes)

IT DNA formation
(replication; methods and compns. for assaying analytes)

IT Fatty acids, analysis
RL: ANT (Analyte); ANST (Analytical study)
(saturated; methods and compns. for assaying analytes)

IT DNA
RL: ANT (Analyte); ANST (Analytical study)
(single-stranded; methods and compns. for assaying analytes)

IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(storage; methods and compns. for assaying analytes)

IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(structural; methods and compns. for assaying analytes)

IT Recombination, genetic

(transposition; methods and compns. for assaying analytes)

IT Vitamins
RL: ANT (Analyte); ANST (Analytical study)
(water-soluble; methods and compns. for assaying analytes)

IT 9033-25-4, Methyltransferase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Betane-homocysteine; methods and compns. for assaying analytes)

IT 50-69-1, Ribose 50-81-7, Ascorbic acid, analysis 50-89-5, Thymidine, analysis 50-99-7, Glucose, analysis 52-90-4, Cysteine, analysis 53-57-6, Nadph 53-84-9, Nad+ 54-47-7, Pyridoxal 5'-**phosphate** 56-40-6, Glycine, analysis 56-41-7, Alanine, analysis 56-45-1, Serine, analysis 56-65-5, Atp, analysis 56-82-6, Glyceraldehyde 56-84-8, Aspartic acid, analysis 56-85-9, Glutamine, analysis 56-86-0, Glutamic acid, analysis 56-87-1, Lysine, analysis 57-10-3, Palmitic acid, analysis 57-11-4, Octadecanoic acid, analysis 57-48-7, Fructose, analysis 57-88-5, Cholesterol, analysis 58-61-7, Adenosine, analysis **58-64-0**, **Adp**, analysis 58-68-4, Nadh 58-85-5, Biotin 58-86-6, Xylose, analysis 58-96-8, Uridine 58-97-9, Ump, analysis 58-98-0, Udp, analysis 59-23-4, Galactose, analysis 59-30-3, analysis 59-43-8, Thiamine, analysis 59-67-6, Nicotinic acid, analysis 60-18-4, Tyrosine, analysis 61-19-8, Amp, analysis 61-90-5, Leucine, analysis 63-37-6, Cmp 63-38-7, Cdp 63-39-8, Utp 63-68-3, Methionine, analysis 63-91-2, Phenylalanine, analysis 64-17-5, Ethanol, analysis 65-23-6, Pyridoxin 65-42-9, Lyxose 65-46-3, Cytidine 65-47-4, Ctp 68-19-9, Vitamin b12 69-93-2, Uric acid, analysis 70-47-3, Asparagine, analysis 71-00-1, Histidine, analysis 72-18-4, Valine, analysis 72-19-5, Threonine, analysis 73-22-3, Tryptophan, analysis 73-32-5, Isoleucine, analysis 74-79-3, Arginine, analysis 79-83-4, Pantothenic acid 83-48-7, Stigmasterol 83-88-5, Riboflavin, analysis 85-32-5, Gmp 86-01-1, Gtp 107-43-7, Betaine 118-00-3, Guanosine, analysis 122-32-7, Triolein 134-35-0 143-07-7, Lauric acid, analysis 146-91-8, Gdp 147-81-9, Arabinose 147-85-3, Proline, analysis 365-07-1, Dtmp 365-08-2, Dttp 453-17-8, Triose 491-97-4, Dtdp 506-30-9, Arachidic acid 544-63-8, Myristic acid, analysis 555-43-1, Tristearin 555-44-2, Tripalmitin 557-59-5, Lignoceric acid 653-63-4, Damp 800-73-7, Dcdp 902-04-5, Dgmp 964-26-1, Dump 979-92-0, S-Adenosylhomocysteine 1032-65-1, Dcmp 1406-16-2, Vitamin d 1406-18-4, Vitamin e 1758-51-6, Erythrose 1927-31-7, Datp 2056-98-6, Dctp 2152-76-3, Idose 2564-35-4, Dgtp 2793-06-8, Dadp 3019-74-7, Sedoheptulose 3432-99-3 3458-28-4, Mannose **3493-09-2**, Dgdp 4033-27-6 5556-48-9, Ribulose 5987-68-8, Altrose 6027-13-0, Homocysteine 6038-51-3, Allose 7439-89-6, Iron, analysis 7439-95-4, Magnesium, analysis 7439-96-5, Manganese, analysis 7439-98-7, Molybdenum, analysis 7440-02-0, Nickel, analysis **7440-09-7**, **Potassium**, analysis 7440-21-3, Silicon, analysis 7440-23-5, Sodium, analysis 7440-31-5, Tin, analysis 7440-38-2, Arsenic, analysis 7440-42-8, Boron, analysis 7440-47-3, Chromium, analysis 7440-48-4, Cobalt, analysis 7440-50-8, Copper, analysis 7440-62-2, Vanadium, analysis 7440-66-6, Zinc, analysis 7440-70-2, Calcium, analysis 7553-56-2, Iodine, analysis 7732-18-5, Water, analysis 7782-41-4, Fluorine, analysis 7782-44-7, Oxygen, analysis 7782-50-5, Chlorine, analysis 9004-34-6, Cellulose, analysis 9004-61-9, Hyaluronic acid 9005-25-8, Starch, analysis 9005-79-2, Glycogen, analysis 11103-57-4, Vitamin a 12001-79-5, Vitamin **k** 12672-30-9, Arsenic ion, analysis 15158-11-9, analysis 16887-00-6, Chloride, analysis 16984-48-8, Fluoride, analysis 19163-87-2, Gulose 29884-64-8, Threose 30077-17-9, Talose 42616-25-1, Methioninase
RL: **ANT (Analyte)**; ANST (Analytical study)
(methods and compns. for assaying analytes)

IT 9001-36-9, Glucokinase 9001-51-8, Hexokinase 9001-56-3, Hydroxy steroid dehydrogenase 9001-78-9, Alkaline phosphatase 9002-03-3, Dihydrofolate reductase 9002-12-4, Urate oxidase **9002-13-5**, **Urease** 9003-99-0, Peroxidase 9023-99-8D, Cystathionine β-synthase, mutant 9025-54-1D, S-Adenosylhomocysteine hydrolase, mutant 9026-00-0, Cholesterol esterase 9028-69-7, Methylenetetrahydrofolate reductase 9028-76-6, Cholesterol oxidase 9031-61-2, Thymidylate synthase 9031-72-5, Alcohol dehydrogenase 9055-00-9, Glucose isomerase 37290-90-7, Methionine synthase 50812-37-8, Glutathione S-transferase 61969-99-1, Luciferase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(methods and compns. for assaying analytes)

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L43 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:160323 HCAPLUS
DN 114:160323
ED Entered STN: 03 May 1991
TI Wholly microfabricated biosensors, and manufacture and use thereof
IN Cozzette, Stephen N.; Davis, Graham; Itak, Jeanne A.; Lauks, Imants R.; Mier, Randall M.; Piznik, Sylvia; Smit, Nicolaas; Steiner, Susan J.; Van der Werf, Paul; Wieck, Henry J.
PA I-Stat Corp., USA
SO PCT Int. Appl., 195 pp.
CODEN: PIXXD2
DT Patent
LA English
IC G01N027-26; B01D061-00; B01D063-00; B67D005-00; C12Q001-00
CC 9-7 (Biochemical Methods)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9005910	A1	19900531	WO 1989-US5227	19891112
	W: JP, KR				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 5200051	A	19930406	US 1989-432714	19891107
	EP 442969	A1	19910828	EP 1990-900548	19891113
	EP 442969	B1	20020227		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 04503249	T2	19920611	JP 1990-500757	19891113
	JP 3105919	B2	20001106		
	AT 213833	E	20020315	AT 1990-900548	19891113
	CA 2002848	AA	19900514	CA 1989-2002848	19891114
	CA 2002848	C	19990831		
	CA 2221178	C	20010123	CA 1989-2221178	19891114
	US 5063081	A	19911105	US 1990-567870	19900815
	US 5212050	A	19930518	US 1990-568441	19900815
	US 5466575	A	19951114	US 1992-943345	19920910
	US 5554339	A	19960910	US 1993-109507	19930819
	US 5837446	A	19981117	US 1995-482517	19950607
	US 5837454	A	19981117	US 1995-484095	19950607
	US 6306594	B1	20011023	US 1998-193370	19981117
	JP 2000065791	A2	20000303	JP 1999-38753	19990217
	JP 3137612	B2	20010226		
	US 2002090738	A1	20020711	US 2001-941661	20010830
PRAI	US 1988-270171	A	19881114		
	US 1989-381223	A	19890713		
	US 1989-432714		19891107		
	JP 1990-500757	A3	19891113		
	WO 1989-US5227	W	19891113		
	CA 1989-2002848	A3	19891114		
	US 1992-943345	A3	19920910		
	US 1995-484095	A3	19950607		
	US 1998-193370	A1	19981117		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9005910	IC	G01N027-26IC B01D061-00IC B01D063-00IC B67D005-00IC C12Q001-00
WO 9005910	ECLA	B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R
US 5466575	ECLA	B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R
US 5554339	ECLA	B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R
US 5837446	ECLA	G01N033/543K2B
US 5837454	ECLA	B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R

US 6306594 ECLA B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R
US 2002090738 ECLA B01L003/00C6M; B01L003/02D; C12Q001/00B; G01N033/543K2B; G01N035/00R

OS MARPAT 114:160323

AB A microfabricated biosensor which may be uniformly mass produced comprises (a) a base sensor (e.g. an electrochem. transducer); (b) a permselective layer (e.g. a polymer film) optionally containing an ionophore, superimposed over at least part of layer (a) and sufficiently thick to pass mols. of mol. weight ≤50 and exclude mols. of mol. weight ≥120; and (c) a biolayer covering at least part of layer (b). The biolayer comprises (i) a bioactive mol. which selectively interacts with an analyte and (ii) a support matrix derived from a photoformable proteinaceous mixture and/or a film-forming latex through which the analyte can permeate. An electrolyte layer may be interposed between layers (a) and (b). Layer (c) may addnl. be covered by a layer which attenuates analyte transport and a photoresist cap. Layer (b) prevents electroactive interfering species from undergoing redox reactions at the indicator electrode. Methods for conducting assays (e.g. immunoassays) using the sensors are described. Thus, the base sensor for a glucose sensor comprised an array of unit cells on a Si wafer; each unit cell consisted of an Ag/AgCl reference/counter electrode and 2 Ir catalytic electrodes prepared by plasma deposition or sputtering and standard lithog. techniques including spin-coating with a pos. photoresist. Layer (b) was prepared by spin-coating an alc. solution of N-(2-aminoethyl)-3-aminopropyltrimethoxysilane onto the wafer and baking. Layer (c) was prepared from a mixture of fish gelatin and ferric ammonium citrate (photoinitiator) to which were added glucose oxidase, crosslinking agent (N,N'-methylenebisacrylamide), and a sugar alc. (to alter the porosity). An attenuation layer contained dimethylsiloxane-bisphenol A carbonate copolymer.

ST biosensor permselective polymer photoformable protein; glucose sensor oxidase gelatin

IT Blood analysis
(IgG and theophylline determination in, microfabricated biosensor for)

IT Body fluid
(anal. of, microfabricated biosensor for)

IT Albumins, uses and miscellaneous
Caseins, uses and miscellaneous
Collagens, uses and miscellaneous
RL: USES (Uses)
(as matrix for bioactive mol., in microfabricated biosensor)

IT Glycerides, analysis
RL: ANT (Analyte); ANST (Analytical study)
(determination of, with microfabricated biosensor)

IT Ligands
RL: ANT (Analyte); ANST (Analytical study)
(determination of, with receptor-containing microfabricated biosensor)

IT Gas analysis
(electrodes for, microfabricated biosensors containing)

IT Transition metals, uses and miscellaneous
RL: USES (Uses)
(indicator electrodes of, in microfabricated biosensor)

IT Crosslinking agents
Electrolytes
Latex
Agglutinins and Lectins
Antibodies
Antigens
Deoxyribonucleic acids
Enzymes
Ribonucleic acids
Glycoproteins, uses and miscellaneous
Immunoglobulins
Proteins, uses and miscellaneous
Salts, uses and miscellaneous
RL: ANST (Analytical study)
(microfabricated biosensor containing)

IT Receptors
RL: ANST (Analytical study)
(microfabricated biosensor containing, for ligand determination)

IT Immunochemical analysis
(microfabricated biosensor for)
IT Biosensors
(microfabricated, for biochem. anal.)
IT Gelatins, uses and miscellaneous
RL: USES (Uses)
(of fish, as matrix for bioactive mol. in microfabricated biosensor)
IT Ionophores
(permselective membrane containing, in microfabricated biosensor)
IT Rubber, silicone, uses and miscellaneous
Siloxanes and Silicones, uses and miscellaneous
Urethane polymers, uses and miscellaneous
RL: USES (Uses)
(permselective membrane, in microfabricated biosensor)
IT Polymers, uses and miscellaneous
RL: USES (Uses)
(permselective membranes, in microfabricated biosensor)
IT Electric conductivity and conduction
Sound and Ultrasound
(sensor for, in microfabricated biosensor)
IT Immunoglobulins
RL: ANT (Analyte); ANST (Analytical study)
(G, determination of, in blood serum, microfabricated biosensor for)
IT Electrodes
(bio-, enzyme, microfabrication of)
IT Analysis
(biochem., microfabricated biosensor for)
IT Polyoxyalkylenes, uses and miscellaneous
RL: USES (Uses)
(di-Me siloxane-, permselective membranes, in microfabricated biosensor)
IT Siloxanes and Silicones, uses and miscellaneous
RL: USES (Uses)
(di-Me, polyoxyalkylene-, permselective membranes, in microfabricated biosensor)
IT Transducers
(electrochem., microfabricated biosensor containing)
IT Crown compounds
RL: ANST (Analytical study)
(ethers, as ionophores, permselective membrane containing in microfabricated biosensor)
IT Electromagnetic wave
(evanescent, sensor for, in microfabricated biosensor)
IT Transistors
(field-effect, microfabricated biosensor containing)
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(halides, as ionophores, permselective membrane containing in microfabricated biosensor)
IT Nucleotides, polymers
RL: ANST (Analytical study)
(oligo-, microfabricated biosensor containing)
IT Waveguides
(optical, microfabricated biosensor containing)
IT Membrane, biological
(permselective, microfabricated biosensor containing, for biochem. anal.)
IT Resists
(photo-, microfabricated biosensor containing)
IT Nucleotides, polymers
Hydroxy compounds
RL: ANST (Analytical study)
(poly-, microfabricated biosensor containing)
IT Amines, uses and miscellaneous
RL: USES (Uses)
(tertiary, as ionophores, permselective membrane containing in microfabricated biosensor)
IT Electric resistors
(thermistors, microfabricated biosensor containing)
IT Globulins, uses and miscellaneous
RL: USES (Uses)

(γ-, as matrix for bioactive mol., in microfabricated biosensor)

IT 2001-95-8, Valinomycin 6833-84-7, Nonactin 17090-79-8, Monensin 28636-21-7, Methylmonensin
RL: ANST (Analytical study)
(as ionophore, permselective membrane containing, in microfabricated biosensor)

IT 7664-38-2D, Phosphoric acid, esters
RL: ANST (Analytical study)
(as ionophores, permselective membrane containing in microfabricated biosensor)

IT 1185-57-5, Ferric ammonium citrate 2944-66-3 7778-50-9, Potassium dichromate 7789-09-5, Ammonium dichromate 22742-18-3 29696-34-2 29696-35-3 133117-70-1 7705-08-0, Ferric chloride, biological studies
RL: ANST (Analytical study)
(as photosensitizer, in microfabrication of biosensor)

IT 50-81-7, Ascorbic acid, analysis 50-99-7, D-Glucose, analysis 56-65-5, **Adenosine** 5'-**triphosphate**, analysis 57-00-1, Creatine 57-88-5, Cholesterol, analysis 58-55-9, Theophylline, analysis 64-17-5, Ethanol, analysis 69-93-2, Uric acid, analysis 124-38-9, Carbon dioxide, analysis 635-65-4, analysis **7440-09-7**, **Potassium**, analysis 7440-23-5, Sodium, analysis 7440-70-2, Calcium, analysis 7722-84-1, Hydrogen peroxide, analysis 7782-44-7, Oxygen, analysis 9027-41-2, Hydrolase 12408-02-5, Hydrogen ion, analysis 14798-03-9, Ammonium, analysis 16887-00-6, Chloride, analysis
RL: **ANT (Analyte)**; ANST (Analytical study)
(determination of, with microfabricated biosensor)

IT 7439-88-5, Iridium, uses and miscellaneous 7439-97-6, Mercury, uses and miscellaneous 7440-04-2, Osmium, uses and miscellaneous 7440-05-3, Palladium, uses and miscellaneous 7440-06-4, Platinum, uses and miscellaneous 7440-16-6, Rhodium, uses and miscellaneous 7440-18-8, Ruthenium, uses and miscellaneous 7440-22-4, Silver, uses and miscellaneous 7440-44-0, Carbon, uses and miscellaneous 7440-57-5, Gold, uses and miscellaneous
RL: USES (Uses)
(indicator electrode of, in microfabricated biosensor)

IT 110-26-9D, reaction products with gelatin 9000-86-6, Alanine transaminase 9000-92-4, Amylase 9000-97-9 9001-15-4 9001-18-7 9001-37-0, Glucose oxidase 9001-51-8, Hexokinase 9001-60-9, Lactate dehydrogenase 9001-62-1, Lipase 9001-78-9, Alkaline phosphatase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase **9002-13-5**, **Urease** 9013-79-0, Esterase 9025-13-2, Creatininase 9026-00-0, Cholesterol esterase 9028-53-9, Glucose dehydrogenase 9028-76-6, Cholesterol oxidase 9029-22-5 9030-66-4, Glycerol kinase 9032-21-7, NADH oxidase 9046-27-9, γ-Glutamyl transpeptidase 9046-28-0, Glycerol 3-**phosphate** oxidase 37340-58-2, Creatinase 39346-34-4, L-Glutamate oxidase 80619-01-8
RL: ANST (Analytical study)
(microfabricated biosensor containing)

IT 7803-62-5D, Silane, derivs.
RL: ANST (Analytical study)
(permselective films, in microfabricated biosensor)

IT 78-10-4, Tetraethyl orthosilicate 681-84-5, Tetramethyl orthosilicate 682-01-9, Tetrapropyl orthosilicate 919-30-2, 3-Aminopropyltriethoxysilane 1067-25-0 1760-24-3 2996-92-1 4766-57-8, Tetrabutyl orthosilicate 5089-70-3, 3-Chloropropyltriethoxysilane 5089-72-5, N-(2-Aminoethyl)-3-aminopropyltriethoxysilane 7538-44-5 9002-84-0, Poly(tetrafluoroethylene) 9002-86-2 9004-35-7, Cellulose acetate 9004-70-0, Cellulose nitrate 13822-56-5, 3-Aminopropyltrimethoxysilane 24801-88-5, 3-Isocyanatopropyltriethoxysilane 40762-31-0, 11-Aminoundecyltrimethoxysilane 75822-22-9 82887-05-6 120183-15-5 132935-19-4 132935-20-7 132935-22-9 132950-88-0
RL: ANST (Analytical study)
(permselective membrane, in microfabricated biosensor)

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FILE LAST UPDATED: 1 APR 2005 <20050401/UP>
MOST RECENT DERWENT UPDATE: 200521 <200521/DW>
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FOR DETAILS. <<<

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L66 ANSWER 1 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1995-027265** [04] WPIX
DNC C1995-012205
TI Compsn. for measurement of potassium ion, providing high accuracy - contains **urea amidoliase**, **urea**, ATP, bi carbonate ion and magnesium ion.
DC B04 D16 E34 J04
PA (TOYM) TOYOBO KK
CYC 1
PI JP 06311897 A 19941108 (199504)* 5 C12Q001-58
ADT JP 06311897 A JP 1993-103034 19930428
PRAI JP 1993-103034 19930428
IC ICM C12Q001-58
ICS **C12Q001-527**
AB JP 06311897 A UPAB: 19950201
Compsn. contains (A) urea amido liase; (B) urea; (C) **adenosine triphosphate**; (D) bicarbonate ion; and (E) magnesium ion. The enzyme (A) catalyses the reaction of urea with bicarbonate ion and ATP to form allophanic acid which further reacts with URL to form ammonia. The bicarbonate source is e.g. sodium bicarbonate. The magnesium ion source is e.g. magnesium sulphate.
USE/ADVANTAGE - Without a sodium- ion-binding agent, method permits easy and accurate determn. of potassium ion in a short time.
Dwg. 0/6
FS CPI
FA AB; GI; DCN
MC CPI: B04-B03B; **B04-L06**; **B05-A01A**; B05-A01B; B05-C04; B10-A13C; B11-C08E3; B12-K04; D05-H09; E05-G07; E10-A13B2; E11-Q03; E33; E33-D; E34-B04; J04-B01B

L66 ANSWER 2 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1994-329040** [41] WPIX
DNC C1994-149094
TI Reagent compsn. for measurement of nitrogen of urea - comprises urea amiderease, ATP, phosphoenol-pyruvic acid, pyruvic acid kinase, pyruvic acid dehydrogenase and water soluble formazan pigment.
DC B04 D16 E16 J04
PA (TOYM) TOYOBO KK
CYC 1
PI JP 06253899 A 19940913 (199441)* 4 C12Q001-58
ADT JP 06253899 A JP 1993-41416 19930302
PRAI JP 1993-41416 19930302
IC ICM C12Q001-58

ICS C12Q001-32; C12Q001-48; **C12Q001-527**
AB JP 06253899 A UPAB: 19941206
Reagent compsn. for measurement of nitrogen of urea comprises urea amiderease, **adenosine triphosphate**, **phosphoenol** pyruvic acid, pyruvic acid kinase, pyruvic acid dehydrogenase and water soluble formazan pigment.
ADVANTAGE - Rapid and accurate measurement can be attained.
Dwg. 0/1
FS CPI
FA AB; GI; DCN
MC CPI: B04-B03B; B04-L01; B04-L03D; B04-L04; **B04-L06**; B05-B01P; B10-A13C; B10-A16; B11-C07B1; B11-C08E3; B12-K04; D05-A02B; D05-H09; E05-G07; E05-G09D; E10-A09B7; E10-A13B2; E10-A16B; E11-Q03; J04-B01B

L66 ANSWER 3 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1991-133865** [19] WPIX
DNN N1991-102834 DNC C1991-057673
TI Determn. of spatial distribution of metabolites in tissue samples - by bio-luminescence, using concentrate viscous solution of luciferase and counting photons in unit area.
DC A96 B04 D16 P81
IN MULLERKILE, W; WALENTA, S
PA (MULL-I) MULLER-KLIESER W
CYC 1
PI DE 3935974 A 19910502 (199119)*
ADT DE 3935974 A DE 1989-3935974 19891028
PRAI DE 1989-3935974 19891028
IC C12Q001-06; G02B021-28
AB DE 3935974 A UPAB: 19930928
Determn. of the spatial distribution of metabolites in tissue samples by bioluminescence, by treating the sample with luciferase solution and opt. another enzyme solution, and counting the photons/unit of surface of the tissue sample, using a photon-counter and a video camera, an enzyme solution with high luciferase concentration and high viscosity is used.
The enzyme solution has luciferase concentration of 0.1-20 (8-12) mU/ml and opt. a gel matrix; it may contain gelatine and/or polyvinylpyrrolidone. The enzyme solution applied in frozen form, especially as a thin layer, to the tissue sample, and the temperature is then allowed to rise to just above the dew point of the sandwich so formed. By means of an image processor/integrator for the points of the image surface, with variable time constant for the photon enumeration, a definite time interval is singled out during the whole course of the reaction.
USE/ADVANTAGE - The method can be used to determine distribution of metabolitesa, e.g. glucose, lactate and **adenosine triphosphate** (ATP) in tumour tissues. Cross-diffusion or inter-flowing of enzymes and substances to be determined is avoided, as is diffusion of light by gas bubbles in the enzyme layer. The photon-emitting chemical reactions are much more rapid, giving quicker tissue analysis.
1/1
FS CPI GMPI
FA AB; GI; DCN
MC CPI: A12-V03C2; A12-W11L; B04-B02C2; B04-B03B; B10-A07; B10-C04D; B11-C07B4; B11-C08E3; B12-K04A; D05-A02A; D05-H09

L66 ANSWER 4 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1985-057246** [10] WPIX
DNC C1985-024871
TI Enzyme reagent for colorimetric urea assay - containing colour formers, urea amido lyase, pyruvate kinase, pyruvate oxidase and substrates.
DC B04 P31
IN FOSSATI, P
PA (MILE) MILES ITAL SPA
CYC 14
PI EP 133681 A 19850306 (198510)* 18
R: AT BE CH DE FR GB LI NL SE
AU 8431381 A 19850214 (198514)
JP 60054699 A 19850329 (198519)
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IC A61B000-00; C12N009-12; C12Q001-58
AB EP 133681 A UPAB: 19930925
Compsn. for determining urea in a liquid sample contains urea amidolyase (I); pyruvate kinase (II); pyruvate oxidase (III); mono- and di-valent cations; phosphoenol pyruvate (PIP); thiamine **pyrophosphate** (TPP); ATP; a bicarbonate; a colour indicating system and opt. inorganic **phosphate.** The colour indicator pref. comprises a peroxidatively-active agent, especially peroxidase, plus colour formers.
USE/ADVANTAGE - The compsn. is used for assaying urea in urine and blood. It provides a sensitive, one-step colorimetric assay with better results than for compsns. containing **urease.** High reaction temps. are not required and the compsn. is suitable for routine use in automated instruments.
0/0
FS CPI GMPI
FA AB
MC CPI: B03-B; B04-B02C2; B04-B02C3; B04-B03; B04-B04B; B04-B04D; **B05-A01A**; B05-A01B; B05-B01P; B05-C04; B10-A13C; B11-C07B; B12-K04

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